

1646

1600

## RAW SEQUENCE LISTING

DATE: 12/04/2001

PATENT APPLICATION: US/09/804,357B

TIME: 13:33:59

Input Set : A:\SEQUENCE LISTING.TXT

Output Set: N:\CRF3\11212001\I804357B.raw

4 <110> APPLICANT: White, David  
 5 Zhou, Jianghong  
 6 Tartaglia, Louis A.  
 8 <120> TITLE OF INVENTION: LEPTIN INDUCED GENES  
 10 <130> FILE REFERENCE: 07334-109002  
 12 <140> CURRENT APPLICATION NUMBER: US 09/804,357B  
 13 <141> CURRENT FILING DATE: 2001-03-12  
 15 <150> PRIOR APPLICATION NUMBER: US 09/195,896  
 16 <151> PRIOR FILING DATE: 1998-11-19  
 18 <150> PRIOR APPLICATION NUMBER: US 09/150,857  
 19 <151> PRIOR FILING DATE: 1998-09-10  
 21 <150> PRIOR APPLICATION NUMBER: US 60/106,379  
 22 <151> PRIOR FILING DATE: 1998-10-29  
 24 <160> NUMBER OF SEQ ID NOS: 19  
 26 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 28 <210> SEQ ID NO: 1  
 29 <211> LENGTH: 1196  
 30 <212> TYPE: DNA  
 31 <213> ORGANISM: Mus musculus  
 33 <400> SEQUENCE: 1

34	agatgagtggt	ggggcgctga	agagtcgaagt	tgctgggcat	cctgatgatg	gcaaatgtct	60
35	tcatttattt	gattgtggaa	gtctccaaaa	acagttagcca	agacaaaaat	ggaaagggag	120
36	gagtaataat	ccgaaagag	aagttctgga	agccaccag	cactccccgg	gcatactgga	180
37	acagggaaca	ggagaagctg	aacaggtggt	acaatcccat	cttgaacagg	gtggccaatc	240
38	agacagggga	gctagccaca	tctccaaaca	caagtcacct	gagctattgt	gaaccagact	300
39	cgacggtcat	gacagctgtg	acagatttta	ataatctgcc	ggacagattt	aaagactttc	360
40	tcttgtattt	gagatgcggg	aattactcgc	tgcttataga	tcaaccgaag	aaatgtgcaa	420
41	agaagccctt	cttactattg	gcgataaagt	ccctcattcc	acattttgcc	agaaggcaag	480
42	caattcgggg	gtcttggggc	cgagaaacca	acgtagggaa	ccagacagta	gtgagggctc	540
43	tcctgttggg	caagacaccc	ccagaggaca	accaccctga	cctttcggac	atgcttaagt	600
44	ttgagagtga	caagcaccag	gacatcctca	tgtggaacta	tagagacaca	ttcttcaacc	660
45	tgtccctgaa	ggaagtgtct	tttcttaggt	gggtgagcac	ttcctgtcca	gacgcagagt	720
46	ttgtcttcaa	gggcgatgat	gacgtgtttg	tgaacaccca	tcacatcctt	aattacttga	780
47	atagcttata	caagagcaaa	gccaaagact	tggttcatag	tgacgtgac	cacaatgctg	840
48	gacctcaccg	ggataagaaa	ctgaagtact	acatcccaga	agtcttctac	accggcgctc	900
49	accacccgta	tgccgggggt	ggtggattcc	tgtactccgg	cccccttgcc	ttgaggctgt	960
50	acagtgcgac	tagccgggtc	catctctacc	ctattgatga	tgtttatacg	ggaatgtgcc	1020
51	ttcagaaaact	gggccttggt	ccagagaagc	acaaaggctt	caggacattt	gatattgaag	1080
52	agaaaaataa	gaaaaatatt	tgttcctata	tagacctaat	gttagtacat	agcagaaaac	1140
53	ctcaagagat	gattgatata	tggtctcagt	tgcaaagtcc	taatttaaaa	tgtctga	1196

55 <210> SEQ ID NO: 2  
 56 <211> LENGTH: 397  
 57 <212> TYPE: PRT  
 58 <213> ORGANISM: Mus musculus  
 60 <400> SEQUENCE: 2

61	Met	Ser	Val	Gly	Arg	Arg	Arg	Val	Lys	Leu	Leu	Gly	Ile	Leu	Met	Met
62	1					5			10					15		

ENTERED

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63 Ala Asn Val Phe Ile Tyr Leu Ile Val Glu Val Ser Lys Asn Ser Ser
64          20          25          30
65 Gln Asp Lys Asn Gly Lys Gly Gly Val Ile Ile Pro Lys Glu Lys Phe
66          35          40          45
67 Trp Lys Pro Pro Ser Thr Pro Arg Ala Tyr Trp Asn Arg Glu Gln Glu
68          50          55          60
69 Lys Leu Asn Arg Trp Tyr Asn Pro Ile Leu Asn Arg Val Ala Asn Gln
70 65          70          75          80
71 Thr Gly Glu Leu Ala Thr Ser Pro Asn Thr Ser His Leu Ser Tyr Cys
72          85          90          95
73 Glu Pro Asp Ser Thr Val Met Thr Ala Val Thr Asp Phe Asn Asn Leu
74          100          105          110
75 Pro Asp Arg Phe Lys Asp Phe Leu Leu Tyr Leu Arg Cys Arg Asn Tyr
76          115          120          125
77 Ser Leu Leu Ile Asp Gln Pro Lys Lys Cys Ala Lys Lys Pro Phe Leu
78          130          135          140
79 Leu Leu Ala Ile Lys Ser Leu Ile Pro His Phe Ala Arg Arg Gln Ala
80 145          150          155          160
81 Ile Arg Glu Ser Trp Gly Arg Glu Thr Asn Val Gly Asn Gln Thr Val
82          165          170          175
83 Val Arg Val Phe Leu Leu Gly Lys Thr Pro Pro Glu Asp Asn His Pro
84          180          185          190
85 Asp Leu Ser Asp Met Leu Lys Phe Glu Ser Asp Lys His Gln Asp Ile
86          195          200          205
87 Leu Met Trp Asn Tyr Arg Asp Thr Phe Phe Asn Leu Ser Leu Lys Glu
88          210          215          220
89 Val Leu Phe Leu Arg Trp Val Ser Thr Ser Cys Pro Asp Ala Glu Phe
90 225          230          235          240
91 Val Phe Lys Gly Asp Asp Val Phe Val Asn Thr His His Ile Leu
92          245          250          255
93 Asn Tyr Leu Asn Ser Leu Ser Lys Ser Lys Ala Lys Asp Leu Phe Ile
94          260          265          270
95 Gly Asp Val Ile His Asn Ala Gly Pro His Arg Asp Lys Lys Leu Lys
96          275          280          285
97 Tyr Tyr Ile Pro Glu Val Phe Tyr Thr Gly Val Tyr Pro Pro Tyr Ala
98          290          295          300
99 Gly Gly Gly Gly Phe Leu Tyr Ser Gly Pro Ala Leu Leu Arg Leu Tyr
100 305          310          315          320
101 Ser Ala Thr Ser Arg Val His Leu Tyr Pro Ile Asp Asp Val Tyr Thr
102          325          330          335
103 Gly Met Cys Leu Gln Lys Leu Gly Leu Val Pro Glu Lys His Lys Gly
104          340          345          350
105 Phe Arg Thr Phe Asp Ile Glu Glu Lys Asn Lys Lys Asn Ile Cys Ser
106          355          360          365
107 Tyr Ile Asp Leu Met Leu Val His Ser Arg Lys Pro Gln Glu Met Ile
108          370          375          380
109 Asp Ile Trp Ser Gln Leu Gln Ser Pro Asn Leu Lys Cys
110 385          390          395
112 <210> SEQ ID NO: 3

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113 <211> LENGTH: 1191
114 <212> TYPE: DNA
115 <213> ORGANISM: Mus musculus
117 <400> SEQUENCE: 3
118 atgagtgtgg ggcgtcgaag agtcaagttg ctgggcatcc tgatgatggc aaatgtcttc      60
119 atttatttga ttgtggaagt ctccaaaaac agtagccaag acaaaaatgg aaagggagga      120
120 gtaataatcc cgaaagagaa gttctggaag ccaccagca ctccccgggc atactggaac      180
121 aggggaacagg agaagctgaa caggtggtac aatcccatct tgaacagggt ggccaatcag      240
122 acagggggagc tagccacatc tccaaacaca agtcacctga gctattgtga accagactcg      300
123 acggtcatga cagctgtgac agattttaat aatctgccgg acagatttaa agactttctc      360
124 ttgtatttga gatgccggaa ttactcgctg cttatagatc aaccgaagaa atgtgcaaag      420
125 aagcccttct tactattggc gataaagtcc ctcatccac attttgccag aaggcaagca      480
126 attcgggagt cttggggccg agaaaccaac gtagggaacc agacagtagt gagggtcttc      540
127 ctgttgggca agacaccccc agaggacaac caccctgacc ttctggacat gcttaagttt      600
128 gagagtgaca agcaccagga cactctcatg tggaactata gagacacatt ctccaacctg      660
129 tccctgaagg aagtgtgtgt tcttaggttg gtgagcactt cctgtccaga cgcagagttt      720
130 gtcttcaagg gcgatgatga cgtgtttgtg aacacccatc acatccttaa ttacttgaat      780
131 aqcttatcca agagcaaagc caaagacttg ttcataaggc acgtgatcca caatgctggg      840
132 cctcaccggg ataagaaact gaagtactac atcccagaag tcttctacac cggcgtctac      900
133 ccaccgtatg ccgggggtgg tggattcctg tactccggcc cccttgccct gaggctgtac      960
134 aatgcgacta gccgggtcca tctctaccct attgatgatg tttatacggg aatgtgcctt     1020
135 cagaaactgg gccttggtcc agagaagcac aaaggcttca ggacatttga tattgaagag     1080
136 aaaaataaga aaaatatttg ttcctatata gacctaattg tagtacatag cagaaaacct     1140
137 caagagatga ttgatatctg gtctcagttg caaagtccta atttaaaatg c              1191
139 <210> SEQ ID NO: 4
140 <211> LENGTH: 365
141 <212> TYPE: PRT
142 <213> ORGANISM: Mus musculus
144 <400> SEQUENCE: 4
145 Gln Asp Lys Asn Gly Lys Gly Gly Val Ile Ile Pro Lys Glu Lys Phe
146 1 5 10 15
147 Trp Lys Pro Pro Ser Thr Pro Arg Ala Tyr Trp Asn Arg Glu Gln Glu
148 20 25 30
149 Lys Leu Asn Arg Trp Tyr Asn Pro Ile Leu Asn Arg Val Ala Asn Gln
150 35 40 45
151 Thr Gly Glu Leu Ala Thr Ser Pro Asn Thr Ser His Leu Ser Tyr Cys
152 50 55 60
153 Glu Pro Asp Ser Thr Val Met Thr Ala Val Thr Asp Phe Asn Asn Leu
154 65 70 75 80
155 Pro Asp Arg Phe Lys Asp Phe Leu Leu Tyr Leu Arg Cys Arg Asn Tyr
156 85 90 95
157 Ser Leu Leu Ile Asp Gln Pro Lys Lys Cys Ala Lys Lys Pro Phe Leu
158 100 105 110
159 Leu Leu Ala Ile Lys Ser Leu Ile Pro His Phe Ala Arg Gln Ala
160 115 120 125
161 Ile Arg Glu Ser Trp Gly Arg Glu Thr Asn Val Gly Asn Gln Thr Val
162 130 135 140
163 Val Arg Val Phe Leu Leu Gly Lys Thr Pro Pro Glu Asp Asn His Pro
164 145 150 155 160

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165 Asp Leu Ser Asp Met Leu Lys Phe Glu Ser Asp Lys His Gln Asp Ile
166                               165                               170                               175
167 Leu Met Trp Asn Tyr Arg Asp Thr Phe Phe Asn Leu Ser Leu Lys Glu
168                               180                               185                               190
169 Val Leu Phe Leu Arg Trp Val Ser Thr Ser Cys Pro Asp Ala Glu Phe
170                               195                               200                               205
171 Val Phe Lys Gly Asp Asp Asp Val Phe Val Asn Thr His His Ile Leu
172                               210                               215                               220
173 Asn Tyr Leu Asn Ser Leu Ser Lys Ser Lys Ala Lys Asp Leu Phe Ile
174 225                               230                               235                               240
175 Gly Asp Val Ile His Asn Ala Gly Pro His Arg Asp Lys Lys Leu Lys
176                               245                               250                               255
177 Tyr Tyr Ile Pro Glu Val Phe Tyr Thr Gly Val Tyr Pro Pro Tyr Ala
178                               260                               265                               270
179 Gly Gly Gly Gly Phe Leu Tyr Ser Gly Pro Ala Leu Leu Arg Leu Tyr
180                               275                               280                               285
181 Ser Ala Thr Ser Arg Val His Leu Tyr Pro Ile Asp Asp Val Tyr Thr
182                               290                               295                               300
183 Gly Met Cys Leu Gln Lys Leu Gly Leu Val Pro Glu Lys His Lys Gly
184 305                               310                               315                               320
185 Phe Arg Thr Phe Asp Ile Glu Glu Lys Asn Lys Lys Asn Ile Cys Ser
186                               325                               330                               335
187 Tyr Ile Asp Leu Met Leu Val His Ser Arg Lys Pro Gln Glu Met Ile
188                               340                               345                               350
189 Asp Ile Trp Ser Gln Leu Gln Ser Pro Asn Leu Lys Cys
190                               355                               360                               365

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192 &lt;210&gt; SEQ ID NO: 5

193 &lt;211&gt; LENGTH: 1203

194 &lt;212&gt; TYPE: DNA

195 &lt;213&gt; ORGANISM: Mus musculus

197 &lt;400&gt; SEQUENCE: 5

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198 atgatttgcc cttcagcttt actggttatt ttaagaaatt taatacggga agaaaaaatc      60
199 atttctcaag agatcctcaa ttgtattgaa ttaaggatga aaaaaggga tattcagttg      120
200 aaaaactctg caatcagtga tgcattaaaa gaaatcgata gtagtgtgct caatgttgct      180
201 gtcacccggg agacgggata agggaagtcc agcttcatca ataccctgag aggcattggg      240
202 aatgaagaag aaggtgcagc taaaactggg gtggtggagg taaccatgga aagacatcca      300
203 tacaaacacc ccaatatata caatgtggtt ttttgggacc tgcttgggat tgggaagaca      360
204 aatttcccac caaacactta cctggagaaa atgaagttct atgagtacga tttcttcatt      420
205 attattttcg ccacacgctt caagaaaaat gatatagaca ttgccaaagc aatcagcatg      480
206 atgaagaagg aattctactt cgtgagaacc aaggtggact ctgacataac aaatgaagca      540
207 gatggcaaac ctcaaactt tgacaaagaa aaggtcctgc aggacatccg ccttaactgt      600
208 gtgaacacct ttagggagaa tggcattgct gagccaccaa tcttctgct ctctaacaaa      660
209 aatggttgct actatgactt cccgctctga atggacaagc tgataagtga cctccctatc      720
210 tacaggagac acaattttat ggtctcctta cccaatatca cagattcagt cattgaaaag      780
211 aagcggcaat ttctgaagca raggatttgg ctggaaggat ttgctgctga cctagtgaat      840
212 atcatccctt ctctgacett tctcttgagc agtgatttgg agactctgaa gaaaagcatg      900
213 aaattctacc gcactgtggt tggagtggat gaaacatctt tgcagagatt agctagggac      960
214 tgggaaatag aggtggatca ggtggaggcc atgataaaat ctctgctgt gttcaaacct      1020
215 acagatgaag aaacaatata agaaaggctt tcaagatata ttcaggagtt ctgtttggct      1080

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## RAW SEQUENCE LISTING

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Input Set : A:\SEQUENCE LISTING.TXT

Output Set: N:\CRF3\11212001\I804357B.raw

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216 aatgggtact tacttcttaa aaatagtttt cttaaagaaa tattttacct gaaatattat 1140
217 ttcccttgaca tgggtgactga ggatgctaaa actctttotta aagagatatg tttaagaaac 1200
218 tag 1203
220 <210> SEQ ID NO: 6
221 <211> LENGTH: 400
222 <212> TYPE: PRT
223 <213> ORGANISM: Mus musculus
225 <400> SEQUENCE: 6
226 Met Ile Cys Pro Ser Ala Leu Leu Val Ile Leu Arg Asn Leu Ile Arg
227 1 5 10 15
228 Glu Glu Lys Ile Ile Ser Gln Glu Ile Leu Asn Leu Ile Glu Leu Arg
229 20 25 30
230 Met Lys Lys Gly Asn Ile Gln Leu Thr Asn Ser Ala Ile Ser Asp Ala
231 35 40 45
232 Leu Lys Glu Ile Asp Ser Ser Val Leu Asn Val Ala Val Thr Gly Glu
233 50 55 60
234 Thr Gly Ser Gly Lys Ser Ser Phe Ile Asn Thr Leu Arg Gly Ile Gly
235 65 70 75 80
236 Asn Glu Glu Glu Gly Ala Ala Lys Thr Gly Val Val Glu Val Thr Met
237 85 90 95
238 Glu Arg His Pro Tyr Lys His Pro Asn Ile Pro Asn Val Val Phe Trp
239 100 105 110
240 Asp Leu Pro Gly Ile Gly Ser Thr Asn Phe Pro Pro Asn Thr Tyr Leu
241 115 120 125
242 Glu Lys Met Lys Phe Tyr Glu Tyr Asp Phe Phe Ile Ile Ile Ser Ala
243 130 135 140
244 Thr Arg Phe Lys Lys Asn Asp Ile Asp Ile Ala Lys Ala Ile Ser Met
245 145 150 155 160
246 Met Lys Lys Glu Phe Tyr Phe Val Arg Thr Lys Val Asp Ser Asp Ile
247 165 170 175
248 Thr Asn Glu Ala Asp Gly Lys Pro Gln Thr Phe Asp Lys Glu Lys Val
249 180 185 190
250 Leu Gln Asp Ile Arg Leu Asn Cys Val Asn Thr Phe Arg Glu Asn Gly
251 195 200 205
252 Ile Ala Glu Pro Pro Ile Phe Leu Leu Ser Asn Lys Asn Val Cys His
253 210 215 220
254 Tyr Asp Phe Pro Val Leu Met Asp Lys Leu Ile Ser Asp Leu Pro Ile
255 225 230 235 240
256 Tyr Arg Arg His Asn Phe Met Val Ser Leu Pro Asn Ile Thr Asp Ser
257 245 250 255
258 Val Ile Glu Lys Lys Arg Gln Phe Leu Lys Gln Arg Ile Trp Leu Glu
259 260 265 270
260 Gly Phe Ala Ala Asp Leu Val Asn Ile Ile Pro Ser Leu Thr Phe Leu
261 275 280 285
262 Leu Asp Ser Asp Leu Glu Thr Leu Lys Lys Ser Met Lys Phe Tyr Arg
263 290 295 300
264 Thr Val Phe Gly Val Asp Glu Thr Ser Leu Gln Arg Leu Ala Arg Asp
265 305 310 315 320
266 Trp Glu Ile Glu Val Asp Gln Val Glu Ala Met Ile Lys Ser Pro Ala

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## VERIFICATION SUMMARY

DATE: 12/04/2001

PATENT APPLICATION: US/09/804,357B

TIME: 13:34:00

Input Set : A:\SEQUENCE LISTING.TXT

Output Set: N:\CRF3\11212001\I804357B.raw

L:523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
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L:527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:529 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:531 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:533 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
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L:541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:547 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:674 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:676 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13